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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/977,846	11/25/1997	JOHN O. RYAN	549222000101	3572

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BORISSOV, IGOR N

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rcv. 04/07)

	Application No.	Applicant(s)
Office Action Summary	08/977,846	RYAN, JOHN O.
	Examiner	Art Unit	
	Igor N. Borissov	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *12 April 2007*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1 and 33-61* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1 and 33-61* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *   c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

In view of the Appeal Brief filed on 04/12/2007 PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/JOHN W. HAYES
SUPERVISORY PATENT EXAMINER

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1.   **Claims 1, 33-37, 39-40, 51, 58-61 are rejected under 35 U.S.C. 102(a) as being anticipated by Yoshio et al (JP4310631).**

As per Claim 1.
Yoshio et al ('631) discloses:
a tuner for receiving a broadcast signal, see page 23, line 12;
a memory coupled to the tuner for storing data in the received broadcast signal in a database, see page 23, line 13;
a user interface for providing a set of menus describing the database, and for accepting selections from the set of menus, see page 23, line 25;
a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see page 25, lines 24-25;
a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 23, lines 21-23.

As per Claim 33.
Yoshio et al ('631) further discloses the memory stores the entire database, see page 23, lines 19-26.

As per Claim 34.
Yoshio et al ('631) further discloses the memory comprises a combination of volatile RAM memory and a non-volatile memory, see page 27, lines 15-19 and page 28, lines 2-26.

As per Claim 35.
Yoshio et al ('631) further discloses the non-volatile memory is an optical disk, see page 28, lines 2-26.

As per Claim 36.
Yoshio et al ('631) further discloses the received audio data has been converted from analog form to digital form, see page 24, lines 23-25.

As per Claim 37.

Yoshio et al ('631) further discloses the received audio data is digitized and has been compressed, see page 24, lines 23-25.

As per Claim 39.

Yoshio et al ('631) further discloses the received data has been converted from analog form to digital form, see page 26, lines 17-19.

As per Claim 40.

Yoshio et al ('631) further discloses the received data has been converted to voice data by a voice synthesizer, see page 26, lines 17-19.

As per Claim 51.

Yoshio et al ('631) further discloses a hierarchy for the database, see page 23, lines 25-27.

As per Claim 58.

Yoshio et al ('631) discloses:

receiving the information, see page 27, lines 9-15;

storing the received information in a database, see page 23, lines 10-13;

providing a set of menus describing the database, see page 23, lines 25-26;

accepting selections from the set of menus, see page 23, lines 14-16;

providing the selected data in digital form, see page 24, line 25; and

converting the selected data to an analog signal, see page 28, lines 2-4.

As per Claim 59.

Yoshio et al ('631) further discloses the received information is transmitted by a broadcast signal, see page 27, lines 13-15.

As per Claim 60, 61.

Yoshio et al ('631) further discloses the stored content includes the content of at least one entire program, see page 26, lines 14-20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   **Claims 38, 41-44, 52 and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshio et al ('631) in view of De Bey (WO 99/03112).**

As per Claim 38.

Yoshio et al ('631) do not disclose the received audio data has been encrypted. De Bey ('112) teaches the received audio data is encrypted, see page 11, lines 30-38, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to encrypt the data transmission for the benefit of increased security of data transmission.

As per claim 41.

Yoshio et al ('631) do not disclose a decryptor for decrypting the data.

De Bey ('112) teaches data encrypted, see page 11, lines 30-31, and compressed, see page 11, line 12, and further comprising a decryptor for decrypting, see page 11, lines 31-32 for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 42.

Yoshio et al ('631) do not disclose a decryptor for decrypting the data.

De Bey ('112) further discloses a decompression algorithm to decompress data that has been compressed at a transmitter prior to being broadcast, see figure 2 (40, 50), and page 111, lines 12-15, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 43.

Yoshio et al ('631) do not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 44.

Yoshio et al ('631) do not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be

included as a prefix to the data packet received by the receiver 40, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 52.

Yoshio et al ('631) do not disclose the memory stores data received in a random access memory up to the capacity of the random access memory before transmitting said data to one of a disk medium or tape medium.

De Bey ('112) teaches the memory stores the data received in a random access memory up to the capacity of the random access memory before transmitting said data to one of a disk medium or tape medium, see page 7, lines 23-25 for the benefit of storing the data without exceeding ram buffer capacity.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to store data received in a random access memory up to the capacity of the random access memory before transmitting said data to a disk medium as taught by De Bey ('112) for the benefit of storing the data without exceeding ram buffer capacity.

As per Claim 54.

Yoshio et al ('631) further discloses disk medium is a magnetic disk, see page 27, lines 18-19.

As per Claim 55.

Yoshio et al ('631) further discloses disk medium is a magnetic-optical disk, see page 27, lines 18-19.

As per Claim 56.

Yoshio et al ('631) further discloses disk medium is an optical disk, see column 6, line 28-39.

3.   **Claims 45-50 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshio et al ('631) in view of Official Notice.**

As per Claim 45.

Yoshio et al ('631) does not disclose the user interface is voice activated.

Official Notice is taken that speech recognition is old and well know as shown in

Takahashi (4,682,368), column 2, lines 11-60 for the benefit of hands free operation of the device.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a voice activated user interface as taught by Takahashi (4,682,368) for the benefit of hands free operation of the device.

As per Claim 46.

Yoshio et al ('631) does not disclose:

a manual input device adapted to be mountable on an automobile steering wheel; and

a link from the manual input device to the controller.

Official Notice is taken that control systems on automobile steering wheels are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 47.

Yoshio et al ('631) does not disclose a control for determining the speed at which the speech output device outputs the analog signal.

Official notice is taken that it is old and well known to determine the speed at which the speech device output the output signal as can be seen in Benbassat et al (4,700,322) column 1, lines 28-50 for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to determine the speed at which the speech device output the output signal as taught by Benbassat et al (4,700,322) for the benefit of synchronizing speech with the visualization of messages.

As per Claim 48.

Yoshio et al ('631) does not disclose the tuner channel skips to tune to a particular transmitter.

Official Notice is taken that it is old and well known to skip channels to get to the desired transmitter, as seen in Whitby et al (GB 2 258 102) page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to skip channels to get to the desired transmitter, as taught by Whitby et al (GB 2 258 102) for the benefit of presetting the device to access a specific transmitter.

As per Claim 49.

Yoshio et al ('631) does not disclose an amplifier.

Official notice is taken that amplifiers are old and well known to amplify signals sent to speakers as can be seen in Schwob (5,152,011) figure 1 (26) for the benefit of amplifying signals sent to speakers.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use an amplifier as taught by Schwob ('011) for the benefit of amplifying signals sent to speakers.

As per Claim 50.

Yoshio et al ('631) further discloses mounting the reproduction device on a vehicle, see page 28, lines 6-7, but does not disclose connecting the receiving system to an automobile radio set.

Official Notice is taken that control systems on automobile are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 57.

Yoshio et al ('631) does not disclose a speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old an well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to vary the transmission of the broadcast signal to most efficiently use the available bandwidth.

4.   Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshio et al ('631) in view of De Bey (WO 99/03112) and further in view of Official Notice.

As per Claim 53.

Yoshio et al ('631) further discloses various digital media, see page 23, line 4 and page 27, line 18, but does not disclose digital audio tape.

Official Notice is taken that it is old and well known to use standardized media for recording for the benefit of maximizing public acceptance of the product.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to utilize digital audio tape or any other standard media for

recording for the benefit of maximizing public acceptance of the product.

5.   Claims 1, 33-44, 52, 54-56 and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey (WO 99/03112) in view of Yoshio et al ('631).

As per Claim 1.

De Bey ('112) discloses:

a tuner for receiving a broadcast signal, see figure 2 (40) and page 10 lines 2627 and page 11, lines 4-5;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 2 (42, 42);

a user interface for interacting with the database, see figure 2 (keypad 54, TV 44 provides user input to select program stored in memories 42, 46);

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see figure 2 (52) and page 9, lines 10-11, page 19, lines 32-33;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 8, line 4.

While De Bey teaches that the user interface provides an access to the program stored in the database, De Bey does not explicitly teach that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus.*

Yoshio et al ('631) discloses:

a tuner for receiving a broadcast signal, see page 23, line 12;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see page 23, line 13;

a user interface for providing a set of *menus describing the database, and for accepting selections from the set of menus*, see page 23, line 25;

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see page 25, lines 24-25;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 23, lines 21-23.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify De Bey to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio et al, because it would advantageously allow to

organize the programs by the interest by structuring them into a plurality of hierarchies such as children menus or grandchildren menus (Yoshio et al, page 23, line 25 – page 24, line 1), thereby allowing the user to select the desired channel at a glance without memorizing the program code.

As per Claim 33.

De Bey ('112) further discloses the memory stores the entire database, see page 7, lines 1-33 and page 11, lines 12-15.

As per Claim 34.

De Bey ('112) further discloses the memory comprises a combination of volatile RAM and non-volatile memory, see page 7, lines 10-33 and page 11, lines 12-15.

As per Claim 35.

De Bey ('112) further discloses non-volatile memories such as ROM, see page 7, lines 10-33 and page 11, lines 12-15.

As per Claim 36.

De Bey ('112) further discloses the received audio data has been converted from analog form to digital form, see page 9, lines 36-38.

As per Claim 37.

De Bey ('112) further discloses the received audio data is digitized and has been compressed, see page 9, lines 36-38.

As per Claim 38.

De Bey ('112) further discloses the received audio data is encrypted, see page 11, lines 30-38.

As per Claim 39.

While De Bey (122) teaches that the disclosed system provides transmission optimization for either digital or analog information signals, Be Bey does not specifically disclose analog to digital conversion.

Yoshio et al ('631) further discloses the received data has been converted from analog form to digital form, see page 26, lines 17-19 as an old and well known method of reproducing signals.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use the analog to digital conversion of Yoshio et al ('631) as an old and well known method of reproducing signals.

As per Claim 40.

De Bey ('122) does not specifically disclose a voice synthesizing.

Yoshio et al ('631) further discloses the received data has been converted to

voice data by a voice synthesizer, see page 26, lines 17-19 as an old and well known method of reproducing voice signals.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use the voice synthesis of Yoshio et al ('631) as an old and well known method of reproducing voice signals.

As per claim 41.

De Bey ('112) further discloses the data is in digital form, see page 9, line 11, encrypted, see page 11, lines 30-31, and compressed, see page 11, line 12, and further comprising a decryptor for decrypting, see page 11, lines 31-32.

As per Claim 42.

De Bey ('112) further discloses a decompression algorithm to decompress data that has been compressed at a transmitter prior to being broadcast, see figure 2 (40, 50), and page 111, lines 12-15.

As per Claim 43.

De Bey (112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1.

As per Claim 44.

De Bey (112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be included as a prefix to the data packet received by the receiver 40.

As per Claim 52.

De Bey ('112) further discloses the memory stores the data received in a random access memory up to the capacity of the random access memory before transmitting said data to one of a disk medium or tape medium, see page 7, lines 23-25.

As per Claim 54.

Yoshio et al ('631) further discloses disk medium is a magnetic disk, see page 27, lines 18-19. The motivation to combine the references would be to utilize standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 55.

Yoshio et al ('631) further discloses disk medium is a magnetic-optical disk, see page 27, lines 18-19. The motivation to combine the references would be to utilize standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 56.

De Bey (112) further discloses optical disk, see page 7, line 27.

As per Claim 58.
See reasoning applied to claim 1.

As per Claim 59.
See reasoning applied to claim 1.

As per Claim 60, 61.
Yoshio et al ('631) further discloses the stored content includes the content of at least one entire program, see page 26, lines 14-20. The motivation to combine the references would be to provide convenience to the user to listen uninterrupted program.

6.   **Claims 45-51, 53, 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey ('112) in view of Yoshio et al ('631) and further in view of Official Notice.**

As per Claim 45.
The combination does not disclose the user interface is voice activated.
Official Notice is taken that speech recognition is old and well know as shown in Takahashi (4,682,368), column 2, lines 11-60 for the benefit of hands free operation of the device.
Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a voice activated user interface as taught by Takahashi (4,682,368) for the benefit of hands free operation of the device.

As per Claim 46.
The combination does not disclose:
    a manual input device adapted to be mountable on an automobile steering wheel; and
    a link from the manual input device to the controller.
Official Notice is taken that control systems on automobile steering wheels are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.
Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 47.
The combination does not disclose a control for determining the speed at which the speech output device outputs the analog signal.

Official notice is taken that it is old and well known to determine the speed at which the speech device output the output signal as can be seen in Benbassat et al (4,700,322) column 1, lines 28-50 for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to determine the speed at which the speech device output the output signal as taught by Benbassat et al (4,700,322) for the benefit of synchronizing speech with the visualization of messages.

As per Claim 48.

The combination does not disclose the tuner channel skips to tune to a particular transmitter.

Official Notice is taken that it is old and well known to skip channels to get to the desired transmitter, as seen in Whitby et al (GB 2 258 102) page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to skip channels to get to the desired transmitter, as taught by Whitby et al (GB 2 258 102) for the benefit of presetting the device to access a specific transmitter.

As per Claim 49.

The combination does not disclose an amplifier.

Official notice is taken that amplifiers are old and well known to amplify signals sent to speakers as can be seen in Schwob (5,152,011) figure 1 (26) for the benefit of amplifying signals sent to speakers.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use an amplifier as taught by Schwob ('011) for the benefit of amplifying signals sent to speakers.

As per Claim 50.

The combination does not disclose connecting the receiving system to an automobile radio set.

Official Notice is taken that control systems on automobile are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 53.

The combination does not disclose digital audio tape.

Official Notice is taken that it is old and well known to use standardized media for recording for the benefit of maximizing public acceptance of the product.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to utilize digital audio tape or any other standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 57.

The combination does not disclose a speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old and well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to vary the transmission of the broadcast signal to most efficiently use the available bandwidth.

7.   Claims 1, 33-37, 49, 52, 54-56, 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang (5,057,932) in view of Yoshio et al (`631).

As per Claim 1.

Lang ('932) discloses:

a tuner for receiving a broadcast signal, see figure 3 and column 11, lines 9-40;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 3, (13), column 8, lines 38-50 and column 11, line 30 ;

a user interface for interacting with the database, see column 6, line 53, column 11, lines 3240 and column 8, lines 27-33;

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see figure 3 (14);

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see figure 3 (12).

Lang does not explicitly teach that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*.

Yoshio et al ('631) discloses:

a tuner for receiving a broadcast signal, see page 23, line 12;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see page 23, line 13;

a user interface for providing a set of *menus describing the database, and for accepting selections from the set of menus*, see page 23, line 25;

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see page 25, lines 24-25;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 23, lines

21-23.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lang to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio et al, because it would advantageously allow to organize the programs by the interest by structuring them into a plurality of hierarchies such as children menus or grandchildren menus (Yoshio et al, page 23, line 25 – page 24, line 1), thereby allowing the user to select the desired channel at a glance without memorizing the program code.

As per Claim 33.

Lang ('932) further discloses the memory stores the entire database, see column 8, lines 27-33.

As per Claim 34.

Lang ('932) further discloses the memory comprises a combination of volatile RAM and non-volatile memory, see figure 3 (13, 14).

As per Claim 35.

Lang ('932) further discloses non-volatile memories such as ROM, see figure 3 (14).

As per Claim 36.

Lang ('932) further discloses the received audio data has been converted from analog form to digital form, see figure 3 (A/D, D/A) and column 5, lines 51-53.

As per Claim 37.

Lang ('932) further discloses the received audio data is digitized and has been compressed, see figure 3 (ND, D/A) and column 3, line 51 - column 5, line 50.

As per Claim 49.

Lang ('932) further discloses an amplifier connected to the speech producing sub-system for amplifying the analog signal, see column 11, lines 60-63.

As per Claim 52.

Lang ('932) further discloses a memory stores the data received in a random access memory up to the capacity of the random access memory before transferring said data to one of a disk medium or a tape medium, see column 9, lines 38-56.

As per Claim 54.

Lang ('932) further discloses disk medium is a magnetic disk, see column 6, line 28-39.

As per Claim 55.

Lang ('932) further discloses disk medium is a magnetic-optical disk, see column 6, line 28-39.

As per Claim 56.

Lang ('932) further discloses disk medium is an optical disk, see column 6, line 28-39.

As per Claim 58.

Lang ('932) discloses:

receiving the information, see figure 3 and column 11, lines 9-40;
storing the received information in a database, see column 11, line 30;
providing a set of menus describing the database, see column 11, lines 32-40 and column 8, lines 27-33;
accepting selections from the set of menus, see column 8, lines 27-33;
providing the selected data in digital form, see column 8, lines 5-26; and
converting the selected data to an analog signal, see column 8, lines 38-50.

As per Claim 59.

Lang ('932) further discloses the received information is transmitted by a broadcast signal, see figure 3.

As per Claim 60, 61.

Yoshio et al ('631) further discloses the stored content includes the content of at least one entire program, see page 26, lines 14-20. The motivation to combine the references would be to provide convenience to the user to listen uninterrupted program.

10.   Claims 38, 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang ('932) in view of Yoshio et al ('631) and further in view of Rovira (WO 92/10040).

As per Claim 38.

The combination of Lang ('932) and Yoshio et al ('631) does not disclose that the received audio data has been encrypted.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16.

Therefore, it would have been obvious to one of ordinary skill in the art, at

the time the invention was made to digitize and encrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 41.

The combination of Lang ('932) and Yoshio et al ('631) does not disclose a decryptor for decrypting the data.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16 and further a decryptor for decrypting, see page 14, lines 7-12 for the benefit of reversing the encryption, compression and conversion of the broadcast data.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of reversing the encryption, compression and conversion of the broadcast data.

As per Claim 42.

See reasoning applied to claim 41.

11.   Claims 39-40, 45-48, 50-51, 53, 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang ('932) in view of Yoshio et al ('631) and further in view of in view of Official Notice.

As per Claim 39.

The combination or Lang and Yoshio et al. teaches an analog to digital and digital to analog converters are old and well known, see figure 3 (24, 25), but does not disclose or fairly teach the received data is alphanumeric data and has been converted from analog to digital form.

Official Notice is taken that it is old and well know to convert data from analog to digital, the type of data does not matter, further Atkinson "VCR programming: Making life easier using bar codes" and further Bensch "VPV – Videotext programs videorecorder" teaches use of alpha numerics in vcrs, for the benefit of making vcrs easier to set.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to convert alphanumeric data to digital form for the benefit of easier setting of the vcr.

As per Claim 40.

The combination or Lang and Yoshio et al. teaches an analog to digital and digital to analog converters are old and well known, see figure 3 (24, 25), but does not disclose or fairly teach the received data is alphanumeric data and is converted to voice data by a speech synthesizer.

Official Notice is taken that it is old and well know to convert data from analog to digital, the type of data does not matter, further it is well know for radios and televisions to have voice for the benefit of listening to the audio portion of the program.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to convert alphanumeric data to digital form and convert voice data by a speech synthesizer for the benefit of listening to the audio portion of the program.

As per Claim 45.

The combination or Lang and Yoshio et al. does not disclose the user interface is voice activated.

Official Notice is taken that speech recognition is old and well know as shown in Takahashi (4,682,368), column 2, lines 11-60 for the benefit of hands free operation of the device.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a voice activated user interface as taught by Takahashi (4,682,368) for the benefit of hands free operation of the device.

As per Claim 46.

The combination or Lang and Yoshio et al. does not disclose:
a manual input device adapted to be mountable on an automobile steering wheel; and a link from the manual input device to the controller.

Official Notice is taken that control systems on automobile steering wheels are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 47.

The combination or Lang and Yoshio et al. does not disclose a control for determining the speed at which the speech output device outputs the analog signal.

Official notice is taken that it is old and well known to determine the speed at which the speech device output the output signal as can be seen in Benbassat et al (4,700,322) column 1, lines 28-50 for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to determine the speed at which the speech device output the output signal as taught by Benbassat et al (4,700,322) for the benefit of synchronizing speech with the visualization of messages.

As per Claim 48.

The combination or Lang and Yoshio et al. does not disclose the tuner

channel skips to tune to a particular transmitter.

Official Notice is taken that it is old and well known to skip channels to get to the desired transmitter, as seen in Whitby et al (GB 2 258 102) page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to skip channels to get to the desired transmitter, as taught by Whitby et al (GB 2 258 102) for the benefit of presetting the device to access a specific transmitter.

As per Claim 50.

The combination or Lang and Yoshio et al. does not disclose connecting the receiving system to an automobile radio set.

Official Notice is taken that control systems on automobile are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 51.

The combination or Lang and Yoshio et al. does not disclose a hierarchy for the database.

Official Notice is taken that hierarchical databases are old and well known, as taught by Date "An introduction to Database Systems" in the database arts for structured storage.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to create a hierarchical database as an old and well known method of structuring a database.

As per Claim 53.

The combination or Lang and Yoshio et al. further discloses a tape medium and various digital media, see column 3, lines 51-56 and column 6, line 28-39, but does not disclose digital audio tape.

Official Notice is taken that it is old and well known to use standardized media for recording for the benefit of maximizing public acceptance of the product.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to utilize digital audio tape or any other standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 57.

The combination or Lang and Yoshio et al. does not disclose a speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old an well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to vary the transmission of the broadcast signal to most efficiently use the available bandwidth.

12.   Claims 38, 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang ('932) in view of Yoshio et al ('631), further in view of Rovira (WO 92/10040) and further in view of De Bey ('112).

As per Claim 43.

The combination of Lang, Yoshio et al. and Rovira does not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 44.

The combination of Lang, Yoshio et al. and Rovira does not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be included as a prefix to the data packet received by the receiver 40, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

Response to Arguments

Applicant's remarks of 10 March 2006 have been considered and are not convincing.

The opinions expressed by Mr. Jablonski regarding enablement of the Yoshio reference are not convincing, the use of databases and menus are old and well known and are seen to be inherent in the reference, see page 26, lines 21-23 (the voice information are classified according to their contents and managed by a menu, the classification is seen to disclose an inherent data stored structure and access to the stored data structure is accomplished by menu).

As per remaining arguments, they have been considered but are moot in view of the new ground(s) of rejection.
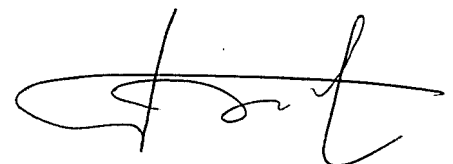
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, see form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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